PROPRIETARY AND CONFIDENTIAL

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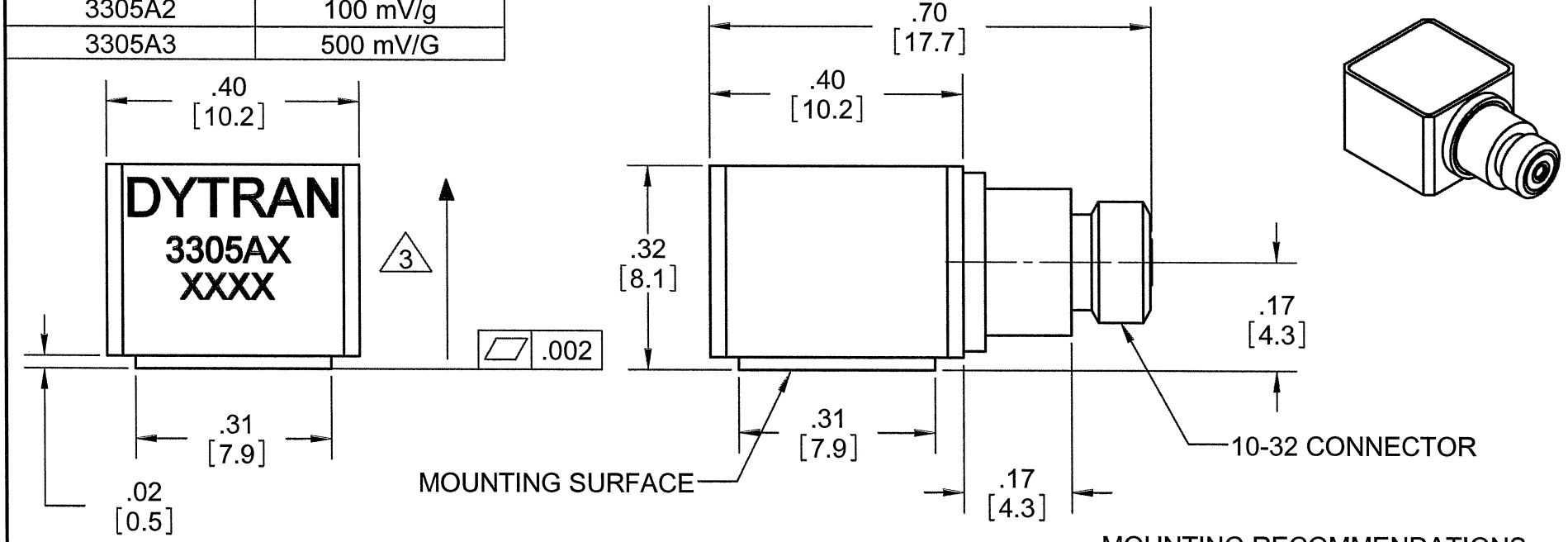
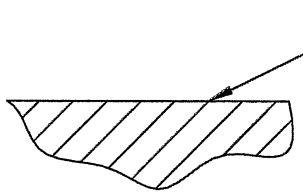
REVISIONS					
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6692	INITIAL RELEASE	RA 11/03/10		

MODEL	SENSITIVITY
3305A1	10 mV/g
3305A2	100 mV/g
3305A3	500 mV/G



3 ARROW SHOWS ACCELERATION DIRECTION FOR POSITIVE OUTPUT

2. WEIGHT: 3.7 GRAMS
1. MATERIAL: TITANIUM



MOUNTING RECOMMENDATIONS
PREPARE A SURFACE AT LEAST .32 BY .32. SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .0001 TIR. USE ONE DROP OF CYANOACRYLATE TO MOUNT THE ACCELEROMETER.

NOTES: UNLESS OTHERWISE SPECIFIED

3305A	
USED ON	NEXT ASSY
APPLICATION	

THIRD ANGLE PROJECTION
USA

UNLESS OTHERWISE SPECIFIED:
INTERPRET DIM & TOL PER ASME Y14.5M - 1994.
REMOVE BURRS.
COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA.
CHAM EXT THDS 45° TO MINOR DIA.
THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS.
THDS PER MIL-S-7742.
DIMENSIONS APPLY AFTER FINISHING.
63
ALL MACHINED SURFACES.
TOTAL RUNOUT WITHIN .005.
BREAK SHARP EDGES .005 TO .010.
MACHINED FILLET RADII .005 TO .015.
WELDING SYMBOLS PER AWS A2.4.
ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES.
DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS
TOLERANCES ARE:

INCHES	METRIC	ANGLES
.XX ± .03	.X ± 0.8	± 1°
.XXX±.010	.XX ±0.25	

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS		DATE
ORIG	RA	10/24/10
CHK		11/22/10
APP		11/22/10
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE:

OUTLINE/INSTALLATION DRAWING, 3305A SERIES

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3305A	A

SCALE: NONE | SOLIDWORKS | SHEET 1 OF 1

172-0081, REV C

Model Number 3305A3	PERFORMANCE SPECIFICATION	DOC NO PS3305A3
	SINGLE AXIS IEPE PLANAR SHEAR ACCELEROMETERS	REV A, ECN 6692, 11/19/10

- **MINIATURE SIZE**
- **HERMETICALLY SEALED**
- **EXCELLENT LINEARITY**

		ENGLISH		SI	
PHYSICAL					
Weight		0.13	oz	3.7	grams
Size	W x H x L	.40 x .32 x .70	Inches	10 x 8.1x 17.8	mm
Connector	Type	10-32 Coaxial		10-32 Coaxial	
Mounting Provision		Adhesive		Adhesive	
Material : Base, Cap and Connector		Titanium		Titanium	
Element Style	Material	Ceramic		Ceramic	
	Type	Planar Shear		Planar Shear	
PERFORMANCE					
Sensitivity, ±5% [1]		500	mV/g	51.02	mV/m/s^2
Range F.S for ± 5 Volts Output		±10	G's	±98	m/s^2
Frequency Response, ±5%		0.3 to 5000	Hz	0.3 to 5000	Hz
±15%		0.15 to 10,000	Hz	0.15 to 10,000	Hz
Resonant Frequency, Nominal		40	kHz	40	kHz
Equivalent Electrical Noise Floor		0.0002	Grms	0.002	m/s^2 rms
Linearity [2]		± 1%	% F.S.	± 1%	% F.S.
Phase Response (±5˚)		5 to 3000	Hz	5 to 3000	Hz
Maximum Transverse sensitivity		5	%	5	%
Strain Sensitivity		0.04	g/μσ	0.39	m/s^2/μσ
ENVIRONMENTAL					
Maximum Vibration		±200	Gpeak	±1962	m/s^2 peak
Maximum Shock		±5000	Gpeak	±49050	m/s^2 peak
Temperature Range		-60 to+150	°F	-51 to+65	°C
Seal, Hermetic		Glass-to-metal/Welded		Glass-to-metal/Welded	
ELECTRICAL					
Supply Current Range [3]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		+ 18 to +30	Volts	+18 to +30	Volts
Output Impedence,Typ		100	Ω	100	Ω
Bias Voltage		+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant, Nom		1.5 to 2.5	Sec	1.5 to 2.5	Sec
Output Signal Polarity for Acceleration Towards Top		Positive		Positive	

This family also includes:

Model	Sensitivity (mV/g)	Range F.S ± 5 Volts (G's)	Max Vibration/Shock(± Gpeak)	Resonant Frequency (kHz)
3305A1	10	±500	600/5000	> 35
3305A2	100	±50	400/5000	> 35

Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)

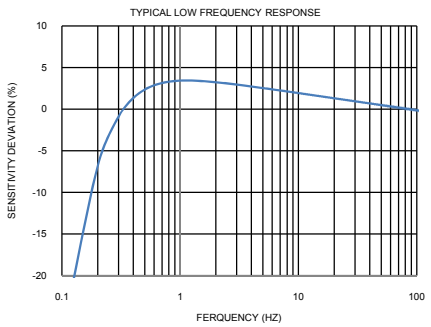
Notes:

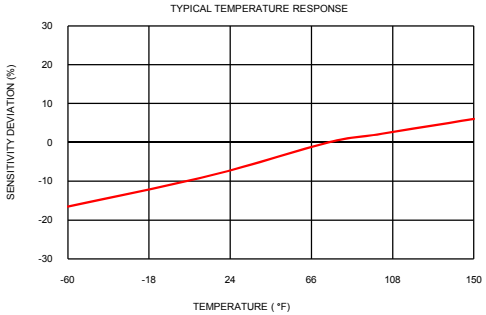
[1] Measure at 100Hz, 1 Grms per ISA RP 37.2

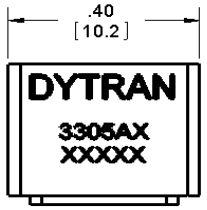
[2] Measure using zero-based straight line method, % of F.S. or any lesser range

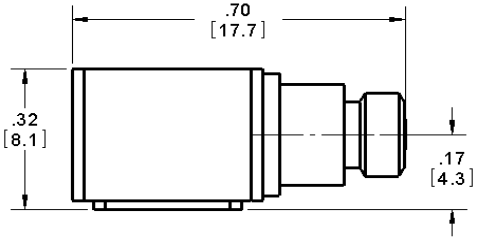
[3] Do not apply power to this system without current limting,20 mA MAX.To do so will destroy the IC charge amplifier

[4] In the interest of constant product improvement, we reserve the right to change the specification without notice









Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3305A for more information.

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